REMARKS

In a non-final Office Action mailed October 7, 2008, the Examiner in charge of the above-noted application imposed a requirement for restriction dividing the claims into three groups, which in the Examiner's opinion are not related. The groups are as follows:

I. Claims 1-3, drawn to a method for breeding cows for desired milking characteristics;

II. Claim 4, drawn to a method of identifying a bull whose daughter cows will have a faster milking time; and

III. Claims 5-7, drawn to a PCR-RFLP kit that comprises a pair of primers which flank the 11th nucleotide position of the bovine beta2-adrenoreceptor gene.

The Examiner asserts that the above three groups of inventions are not so linked as to form a single inventive concept and requires that applicants elect one of the groups for examination. As support, the Examiner asserts that at the time of filing Roets et al., 1986, J. Dairy Sci., 69:3120-3130 disclosed a correlation between milking characteristics and beta2:alpha2-adrenoceptor density ratios.

At the outset, applicants submit that independent Claims 1, 4 and 7 have been amended to further clarify that applicants were the first to discover a variant allele of the bovine beta2-adrenergic receptor (ADRB2) gene and correlated it to milking speed. The claims refer to the variant allele having an adenine (A) nucleotide at position 11 inclusive of the start codon ATG, referred to in the application as an A11C allele (see Specification, pg. 4, [00016-00017]).

Applicants submit that Roets et al. alone or in combination with other documents does not eliminate unity of invention from the claims. The objective of Roets et al. was to investigate the relationship between milk flow and numbers and ratios of adrenoreceptors in tissue of teats from first lactation cows. The results from Roets et al. suggest that milking characteristics might be affected by the concentration of adenoreceptors in the teat (see pg. 3121 1st col., 1st para.). Roets et al. does not enable a skilled artisan to determine which bulls possess an allele (A11C allele) in the bovine beta2-adrenergic receptor (ADRB2) gene that will produce cows with the desired milking traits and somatic cell score phenotype. As such, the above-amended claims do possess unity of invention.

Applicants believe that the Examiner should examine Groups I -III together, as the claims as amended in these groups, are inextricably linked forming a single general inventive concept, that A11C allele of the ADRB2 gene is associated with desired somatic cell score (SCS) phenotype and milking traits. Therefore, no additional searches should be required by the Examiner.

Further, the Office Action requires an election between species of the primer pairs (SEQ ID NOs: 1 and 2 or 3 and 4). The Examiner asserts that although the primer pairs target and amplify the same gene, each pair behaves in a different way in the claimed invention. Applicants submit that the primer pairs do have a common property, namely the primers flank the 11th nucleotide position of a bovine beta2-adrenoreceptor gene coding sequence inclusive of the start codon ATG. Further, it is the intent of the applicants that both sets of primer pairs can be substituted for one another, with the expectation that the same intended result would be achieved. For example, the primers enable detection of a single nucleotide polymorphism at the 11th nucleotide position (the A11C allele).

Although applicants disagree with this restriction, to be fully responsive, applicants provisionally elect Group III, drawn to Claims 5-7 and the species drawn to SEQ ID NOs: 1 and 2. This election is made with traverse and without prejudice to the eventual filing of a divisional application and rejoinder of the non-elected groups and species back into the application.

Also, the Examiner requires that applicants identify the claims readable on the elected species. As such, it is submitted that Claims 5-7 are readable on the elected species.

In addition to the substantive reasons why all of the claims should be examined together, applicants remind the Examiner that procedurally restriction requirements are optional in all cases (see MPEP § 803). For the convenience of the Patent Office and the applicants, the applicants are best served by considering all of the claims in a single patent application and not several separate patent applications.

Also, the fees due in connection with filing a divisional patent application and for prosecution and maintaining a plurality of patents would place an undue burden on the applicants. It is submitted that for the convenience of the Patent Office and the applicants, all parties are best served by considering all of the claims in a single patent application and not several separate patent applications.

For these reasons, applicants respectfully request that the restriction requirement on Groups I through III be reconsidered and withdrawn. Wherefore examination on the merits is respectfully requested.

Fees

No fees are believed due here. If any fee is due or any extension of time is required in this or any subsequent response, please consider this to be a petition for the appropriate extension and a request to charge the fees to the Deposit Account No. 17-0055.

Respectfully submitted,

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